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ABSTRACT

This bibliography is intended to be comprehensive (through December 1, 1973) in its coverage of articles, books, and conference papers on the personalized system of instruction. It also includes some papers dealing with related topics such as the audiotutorial method, individually prescribed instruction and, occasionally, programed instruction. Most of the papers are concerned with teaching at the college or postsecondary level. (Author/MJM)



INDIVIDUALIZED INSTRUCTION IN

HIGHER EDUCATION: A BIBLIOGRAPHY

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PREFACE

This bibliography is intended to be comprehensive in its coverage of articles, books, and conference papers on the Personalized System of Instruction through December 1, 1973. It also includes some papers dealing with related topics such as the Audio-tutorial method, Individually Prescribed Instruction, and occasionally programmed instruction; we have not attempted to cover the field of computerassisted instruction. Most of the papers are concerned with teaching at the college or postsecondary level.

Because of the difficulties of publishing papers on teaching in journals mainly disciplinary in scope, many papers useful to readers of this bibliography are unpublished. Unfortunately, this implies that neither are they refereed, nor can one be assured of access to them. To get a copy of an unpublished paper, we suggest that you write first to the author (if his address can be found) or to the organizer of the conference at which the paper was read (addresses on pp. 1-4). Customs differ in this matter: psychology conference givers often can supply copies of their papers, physicists usually cannot.

To help remedy this situation, the Center for Personalized Instruction is attempting to maintain a file of unpublished papers and to supply copies at cost to requesters. We do not have all of the papers in the bibliography, however. Those which we do have are designated by an asterisk (*). They are available from the Center for \$1.00 each.

I wish to thank the staff of the Center for Personalized Instruction, J. G. Sherman, F. S. Keller and B. A. Green for their thoughtful and incisive comments during the many stages of development of this project.

I would also like to thank Stephen Bono, Kent Johnson, John Hess and Jane Gross for their invaluable assistance.

Every attempt has been made to make this list as comprehensive as possible. If there are authors who have been ommitted or authors who have articles published in the future, we would appreciate receiving a copy of your manuscript for inclusion in future supplements.

R. S. Ruskin Washington, D. C. January, 1974



Papers presented at regional or specialized conferences or conventions will appear by author, title and name of conference only. Readers should refer to these pages for additional conference information and mailing addresses. In the event that a given convention or conference met annually, a date will distinguish the particular year.

American Statistical Association Convention c/o American Statistical Association Convention 806 15th Street, N. W. Washington, D. C. 20015

Annual meeting of the American Psychological Association Montreal, August 1973
Washington, D. C., September 1971
c/o American Psychological Association
1200 17th Street, N.W.
Washington, D. C. 20015

Annual meeting of the American Society for Engineering Education Lubbock, Texas, June 1972
Annapolis, Maryland, June 1971
c/o American Society for Engineering Education
1 Dupont Circle, N.W.
Washington, D. C. 20015

Annual meeting of the Eastern Psychological Association Boston, Massachusetts, April 1972 Washington, D. C., 1968 c/o Murry Benimoff Department of Psychology Glassboro State College Glassboro, New Jersey 08028

Annual meeting of the Midwestern Psychological Association Cleveland, Ohio, May 1972 Chicago, Illinois, May 1969 c/o Winfred F. Hill Department of Psychology Northwestern University Evanston, Illinois 60201



Annual meeting of the Rocky Mountain Psychological Association Las Vegas, Nevada, 1973 Alburqueque, New Mexico, May 1972 Denver, Colorado, May 1971 Alburqueque, New Mexico, May 1966 c/o Harric F. Hess Department of Psychology University of Nevada Las Vegas, Nevada 89109

Annual meeting of the Southeastern Psychological Association Atlanta, Georgia, April 1972 Miamia Beach, Florida, April-May 1971 c/o William D. Spears Department of Psychology Auburn University Auburn, Alabama 36830

Annual meeting of the Southwestern Psychological Association San Antonio, Texas, April-May 1971 c/o Southwestern Psychological Association P. O. Box 7156 University Station Austin, Texas 78712

Annual meeting of the Western Psychological Association Portland, Oregon, April 1972 San Francisco, California, May 1967 c/o Rehald W. Mayer Department of Psychology California State University San Francisco; California 94132

Annual Psi Chi Celloquium, 1972 c/o Psi Chi National Honor Society 1200 17th Street, N. W. Washington, D. C. 20015

California State University at Long Beach Psychology Convention Long Beach, California, May 1972 c/o Josephine Fiebiger Department of Psychology California State University Long Beach, California 90840



Conference on Behavior Research and Technology in Higher Education Georgia State University, October 1973 c/o Dr. James Johnston Department of Psychology Georgia State University Atlanta, Georgia 30303

Conference on the Keller Plan
Massachusetts Institute of Technology, October 1971
c/o Ben A. Green
Center for Personalized Instruction
Georgetown University
Washington, D. C. 20007

Eastern Psychology Association Symposium Washington, D. C., May 1973 c/o Murry Benimoff Department of Psychology Glassboro State College Glassboro, New Jersey 08028

Keller Method Workshop Conference Rice University, March 1972 c/o Alex J. Dessler Space Science Department Rice University Houston, Texas 77001

Meeting of the Association for Advancement of Behavior Therapy October 1972 c/o Association for Advancement of Behavior Therapy 305 East 45th Street New York, New York 10017

Meeting of the Utah Academy of Sciences, Arts and Letters Logan, Utah, September 1971 c/o David Born Department of Psychology Utah State University Logan, Utah 84321

National Convention of the Association for Educational Communications & Technology Las Vegas, Nevada, April 1973 c/o Association for Educational Communications & Technology 1201 16th Street, N.W. Washington, D. C. 20015



Third annual Kansas Conference on Behavioral Analysis in Education Lawrence, Kansas, May 1972 c/o The Department of Human Development University of Kansas 66044

West Coast PSI Conference California State University, November 1972 c/o John Munsee Department of Physics California State University Long Beach, California 90801



<u>,</u>

- Abbott, R. D., & Falstrom, P. M. Aptitude and attribute interactions with a PSI course in elementary statistics. California State University, Fullerton. Paper presented at the West Coast PSI Conference.
- Alba, E., & Pennypacker, H. S. Multiple change score comparison of traditional and behavioral college teaching procedures. <u>Journal of Applied Behavior Analysis</u>, 1972, 5, (2), 121-124.
- Alford, J. L. <u>PSI in intermediate dynamics</u>. Harvey Mudd College. Paper presented at the West Coast PSI Conference.
- *Assmann, J. PSI and its challenge to education. California State College, Dominquez Hills. Paper presented at the West Coast PSI Conference.
 - Austin, S.M., & Gilbert, K. E. Student performance in a Keller-Plan course in introductory electricity and magnetism. American Journal of Physics, 1973, 41, 12-18.
 - Bailey, L. C., & Bailey, J. S. <u>A behavioral analysis and modification of college-level foreign language instruction</u>. Florida State University. Paper presented at the annual meeting of the Southeastern Psychological Association, 1972.
 - Baker, M. M. Individualization of instruction for the introductory biology course. Bioscience, 1970, 20, 1162-1163.
 - Bauer, D. <u>PSI as a past student views it</u>. Brigham Young University. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
 - Bejner, W. <u>Continuous Progress Program in Survey of Earth Science</u>, Educational Technology Publishing Company, Englewood Cliffs, New Jersey.
 - Berry, G. The Keller Method in introductory philosophy courses, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
- *Berthold, H. C. A Keller Plan for behavior adaptation to school and society. Paper presented at the West Coast PSI Conference.
 - Bethell, J. T. Teach yourself physics in your spare time. <u>Harvard Bulletin</u>, November 1972, 30-35.
 - Beyer, J. PSI & physical geography: Learning about learning. University of Colorado, Colorado Springs. Paper presented at the West Coast PSI Conference.
 - Bigler, E. PSI A new world. Brigham Young University. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.



- *Billings, D. B. PSI in the Principles of Economics. Boise State College, Idaho. Paper presented at the West Coast PSI Conference.
- Birnbaum, M. H. Evaluation of Keller Method for teaching statistics. Paper presented at the Conference on the Keller Plan.
- Bitgood, S. C. Comparison of graduated and fixed point systems of contingencymanaged instruction. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Blackburn, T., & Semb, G. The comparative effects of self-grading versus proctor-grading of tests on student performance in a personalized instruction course. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Blair, R. W. Experimentation with PSI in the Linguistics Department at Brigham Young University. Brigham Young University. Paper presented at the West Coast PSI Conference.
- Block, J. H., <u>Mastery Learning</u>, Holt, Rinehard, & Winston, Incorporated, New York, New York, 1971.
- Bloom, B. S. Learning for mastery. <u>Evaluation Comment</u>, 1968, 1, (2), published by the Center for the Study of Evaluation of Instructional Programs, University of California at Los Angeles.
- Blum, H. A., Harrisberger, L., Hoberock, L., Landis, & Obert. What should be new now in teaching mechanical engineering? Paper presented at the annual meeting of the American Society for Engineering Education, 1971.
- Born, D. G. Instructor Monual for Development of a Personalized Instruction Course, Center to Improve Learning and Instruction, University of Utah, 1970.
- Born, D. G. Proctor Manual, Center to Improve Learning and Instruction, University of Utah, 1970.
- Born, D. G. Student withdrawals in personalized instruction courses. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1971.
- Born, D. G. Exam performance and study behavior as a function of study unit size in a PSI course. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Born, D. G., Davis, M., Whelan, P., & Jackson, D. College student study behavior in a personalized instruction course and in a lecture course, in G. Semb, ed., Behavior Analysis and Education, 1972.



- Born, D. G., Gledhill, S. M. & Davis, M. L. Examination performance in lecture-discussion and personalized instruction courses. <u>Journal of Applied Behavior Analysis</u>, 1972, 5, (1), 33-43.
- Born, D. G., & Herbert, E. A further study of personalized instruction in large university classes. Journal of Experimental Education, 1971, 40, 6-11.
- Born, D. G., & Whelan, P. Some descriptive characteristics of student performance in PSI and lecture courses. The Psychological Record, 1973, 23, 145-152.
- Born, D. G., & Zlutnick, S. Personalized instruction. <u>Educational Technology</u>, 1972, 7, (4).
- Bostow, D. E., & Blumenfield, G. J. The effect of two test-retest procedures on the classroom performance of undergraduate college students, in G. Semb, ed., Behavior Analysis and Education, 1972.
- *Bowen, D., & Faissler, W. Entry level testing and the pattern of behavioral objectives in a Keller Plan physics course. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- *Boyko, G. Rate analysis of students in a personalized introductory psychology course at a community college. Paper presented at the Conference on the Keller Plan.
- Brooks, K. M. Experiments in precise college teaching. Florida A & M University. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
- Brooks, K. M. <u>Precision teaching an undergraduate course in general psychology</u>. Florida A & M University. Paper presented at the annual meeting of the American Psychological Association, 1971.
- Brown, J. W., & Thornton, J. W., College Teaching: a Systematic Approach, (Second Edition), McGraw-Hill Book Company, New York, New York, 1971.
- Burgoyne, J. I wonder what ever happened to big brother? North Texas State University. Paper presented at the annual meeting of the Southwestern Psychological Association, 1971.
- Burt, D. W. Study and test performance of college students on concurrent assignment schedules. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Burtner, D. C. <u>Programmatic PSI in Chemistry</u>. California State University, Fresno. Paper presented at the West Coast PSI Conference.



Caldwell, M. A behavior modification experience for undergraduate psychology majors. North Texas State University. Paper presented at the annual meeting of the Southwestern Psychological Association, 1971.

Callioum, J. F. Elemental analysis of the Keller Method of instruction. State University of New York, Steny Brook. Paper presented at the annual meeting of the American Psychological Association, 1973.

Cardwell, C. E. <u>PSI - A tool for the textbook author</u>. Virginia Polytechnic Institute and State University. Paper presented at the West Coast PSI Conference.

Carlson, E. J. PSI and small group dynamics. California State College, San Bernardino Paper presented at the West Coast PSI Conference.

Celinski, O. A Radical Approach to Teaching, Published by author, distributed by the University of Ottawa Bookstore, Ottawa, Ontario, Canada, 1965.

Celinski, O. Announced repetitive tests. <u>Journal of Engineering Education</u>, 1967, 58, (2), 110.

Celinski, O. Announced repetitive tests as a basis for self-directed study and evaluation. Journal of Experimental Education, 1968, 36, (3), 17-26.

*Celinski, O. Dynamic index. Paper presented at the Conference on the Keller Plan.

*Celinski, O. Interactive learning. Paper presented at the Conference on the Keller Plan.

Chadwick, C., Cell, S., & Burns, J. Contingency Management in a Job Corps Setting, Westinghouse Learning Corporation, Behavior Systems Division, Albuquerque, New Mexico.

Chan, K. M. An integrated field classroom oceanography course using individualized instruction. California State University, Long Beach. Paper presented at the West Coast PSI Conference.

Clark, S. G. An innovation for introductory sociology: Personalized System of Instruction. Paper presented at the Conference on Behavior Research and Technology in Higher Education.

Clausing, G., Mueller, K., & Voge, W. Individualized German instruction at the college level - a first appraisal. Foreign Language Annals, 1972, 6, (1).

Cobb, E.S. A report on the teaching apprentice system. Barnard Alumnae, 1970, 14-17.



- *Cobb, E.S. Undergraduate teaching apprentices and reading objectives implementing the Keller Plan. Paper presented at the Conference on the Keller Plan.
- Cohen, A., Slovin, D. L., Franzblau, C., & Sinex, F.M. A self-paced blochemistry course for medical students. Journal of Medical Education, 1973, 48, 289-290.
- Cohen, P.S. Administration and evaluation of contingency-managed instruction with the aid of a computar. Florida State University. Paper presented at the annual meeting of the American Psychological Association, 1971.
- Cohen, P. S., & Cohen, L. R. Computer-generated tests, for a student-paced course. Education Technology, 1973.
- Cole, C., Martin, S., & Vincent, J. A comparison of two teaching formats at the college level. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Collier, K. L., & Smith, R. V. A behavior-based laboratory course in educational psychology. Collier; Northern Wyoming Mental Health Center and Smith, Southwestern State University. Educational Technology, November, 1971.
- Cone, A. L. A student-taught general psychology course. Lynchburg College. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
- Cooper, J. L., & Greiner, J. M. Contingency management in an introductory psychology course produces better retention. Psychological Record, 1971, 21, 391-400.
- Corey, J. R., & McMichael, J.S., Using Personalized Instruction in College Courses, Meredith Corporation, 1970.
- *Corey, J. R., McMichael, J. S., & Tremont, P. <u>Long-term effects of personalized instruction in an introductory psychology course</u>. Paper presented at the annual meeting of the Eastern Psychological Association, 1970.
- Corey, J. R., & McMichael, J. S. Retention in a PSI introductory psychology course, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
- Crow, R., Response analysis in education. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
- Culbertson, S. The evaluation of student performance: theory and practice. American University. Paper presented at the annual meeting of the American Psychological Association, 1973.

- Davis, M. L. University student examination performance under discussion class, review test, and personalized instruction procedures. Paper presented at the annual meeting of the Rocky Mountain Psychological Association.
- Davis, M. L. Mastery test proficiency requirement affects Mastery performance and low GPA student study time in a PSI course. Paper presented at the conference on Behavior Research and Technology in Higher Education.
- *Deal, R. M. Individualized sequences in a Keller course. Paper presented at the Conference on the Keller Plan.
- *De Angele, L., & Shuell, T. J. Individualization of instruction in large college classes. State University of New York, Buffalo: Paper presented at the annual meeting of the American Psychological Association, 1971.
- *De Deurwaerder, C. A. PSI in landscape architecture or paid students improve. Oregon State University. Paper presented at the West Coast PSI Conference.
- Dessler, A. J. Teaching without lectures. Rice University Review, 1971, 6, (1).
- Dessler, A. J. Proceedings of the Keller Method Workshop Conference, 1972. \$1.35 (payable to Rice University), A. J. Dessler, Space Science Department, Rice University, Houston Texas.
- *Duncan, R. C. PSI in the medical school environment. Medical University of South Carolina. Paper presented at the West Coast PSI Conference.
- Edinger, D. Precision teaching in the institution for retarded. Sunland Training Center, Mismi, Florida. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
- *Edwards, K. A. Student as tendion. Utah State University. Paper presented at the annual neeting of the Rocky Mountain Psychological Association, 1972.
- *Edwards, K. A., & Gottula, P. Proctoring oral and written performance in a motivation course. Utah State University. Paper presented at the annual meeting of the American Psychological Association, 1973.
- *Edwards, K. A., & Powers, R. B. Self-management in a beginning psychology course as a Jaboratory exercise. Utah State University. Paper presented at the annual meeting of the American Psychological Association, 1971.
- Edwards, K. A., & Powers, R. B. Self-pacing in a personalized system of instruction: work patterns and course completion. Utah State University. Paper presented at the National Convention of the Association for Educational Communications & Technology, 1973, Journal of Experimental Education, in press.



- Ehrle, E. B. Avoiding the audio-tutorial mistake. Bio Science, 1970, 103.
- Eliason, L. J. <u>PSI in engineering physics at CSULB</u>. California State University, Long Beach. Paper presented at the West Coast PSI Conference.
- Elliott, W. E. Perceptions of high school physics and physics teachers. <u>The Physics</u> Teacher, 1971.
- Elliot, W. E. <u>Experiences with self-paced general physics courses</u>. California State Polytechnic University. Paper presented at the West Coast PSI Conference.
- Elton, L. R. B., Boud, D. J., & Nuttal, J. Teach yourself paradigm: The Keller Plan, Experiment at Surrey. Chemistry in Britain, 1973, 9 (4), 164-168.
- Ensign, J. M., Edwards, K. A., & Powers, R. B. <u>Personalized instruction</u> from the viewpoint of a proctor. Utah State University. Paper presented at the meeting of the Utah Academy of Sciences, Arts, and Letters, 1971.
- Farmer, Jr., Lachter, G., Blaustein, J. J., & Cole, B. K. The role of proctoring in personalized instruction. Journal of Applied Behavior Analysis, 1972, 5, 401-404.
- Fawcett, S. B., & Miller, L. K. The reinforcement of community service behaviors in a university field-work course. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Fernald, P. S. The selection and training of undergraduate teaching assistants for large personalized instruction courses. <u>American Psychological Association Division of the Teaching of Psychology Newsletter</u>, 1973, (publ. University of Missouri):
- Ferster, C. B. Individualized instruction in a large introductory psychology course. Psychological Record, 1968, 18, 521-532.
- Ferster, C. B. The Psychology Learning Center: organization and description. American University. Paper presented at the annual meeting of the American Psychological Association, 1973.
- Fisher, K. M. <u>PSI in genetics</u>. University of California, Davis. Paper presented at the West Coast PSI Conference.
- Fisher, K. M. Teaching with television: individualized instruction. <u>Journal of College Science Teaching</u>. (In Press).
- Fisher, M. B. A programmed course in elementary statistics. California State University, Fresno. Paper presented at the West Coast PSI Conference.



- Glick, D. M. PSI one semester later. Unpublished report, North County Community College, Saranac Lake, New York, 1973.
- Glick, D. M. <u>PSI</u> two semesters later. Unpublished report, North County Community College, Saranac Lake, New York, 1973.
- Godolphin, B. W. <u>To know and to feel: An introduction to psychology</u>. California State College, Sonoma. Paper presented at the West Coast PSI Conference.
- *Goodall, P. Personalized Instruction as viewed by an engineering student. Utah State University. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
 - Green, B. A. <u>A self-paced course in freshman physics</u>. Occasional Paper #2, Education Research Center, Massachusetts Institute of Technology, Cambridge, Massachusetts.
 - Green, B. A. Is the Keller Plan catching on too fast? <u>Journal of College Science Teaching</u>, 1971, 1 (1), 50-52.
 - Green, B. A. Physics teaching by the Keller Plan at M.I.T. <u>American Journal of Physics</u>, 1971, 39, 764-775.
 - Green, B. A. Comment on, "Keller vs. lecture method in general physics instruction", American Journal of Physics, 1973, 41, 706-707.
 - Green, B. A. Fifteen reasons not to use the Keller Plan, in J. G. Sherman, <u>PSI</u>: <u>41</u> Germinal Papers, 1974.
 - Greenspoon, J. The new college program of Temple Buell College. Educational Technology, 1971.
 - Greenspoon, J. Should an entire college curriculum be taught by the Keller Method?, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
 - Greenspoon, J., & Jenson, P. G. <u>New dimensions in higher education</u>: <u>The new college program of Temple Buell College</u>. Temple Buell College, Denver, Colorado.
 - Halfman, R. L., MacVicar, M. L. A., Martin, W. T., Taylor, E. F., & Zacharias, J. R. <u>Tactics for change Check lists for the academic innovator</u>. Occasional Paper #11 of the Education Research Center, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1972.



Hammer, M. 1951 in a business personnel course. Paper presented at the Conference on Behavior Research and Technology in Higher Education.

*Hapkiewicz, W. G. Application of contingency management techniques to the teaching of teachers. Michigan State University. Paper presented at the annual meeting of the Midwestern Psychological Association, 1972.

Harrisburger, L. Self-paced individually prescribed instruction. <u>Journal of Engineering Education</u>, 1971, 61, 508-510.

Herring, B. G. Expansion of PSI (Keller Plan) in engineering and other selected disciplines at the University of Texas. Paper presented at the Conference on Behavior Research and Technology in Higher Education.

Hess, J. H. Keller Plan instruction: Implementation problems, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.

Hess, J. H., & Sherman, J. G. PSI Psychology Course Catalog. The catalog provides information about 250 courses under 18 titles. P.S.I. Psychology Clearing House, Eastern Mannenite College, Harrisonburg, Virginia.

Hoberock, L. L. Personalized instruction in mechanical engineering. <u>Journal of Engineering Education</u>, 1971; 61, 506-597.

Heiserock, L. L. Application of reinforcement learning theory in mechanical engineering, in J. E. Stice, ed., PDI - The Keller Plan Applied in Engineering Education.

Hobereck, F. L., Keen, B. V., Both, C. H., & Wagner, G. R. Theory of PSI evaluated for engine ring education. IEEE Transactions on Education, 1972, F-15, (1), 25-22.

Hochenberry, C., & Grider. The progress as seen by the teaching assistants. Colorado State University. Poper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.

Hoffer, W. Why administrators should know about PSI. College Management Mage inc., 1973, 8 (1).

Hohm, R. L. Effectiveness of Innovations in the teaching of physics - A critique. University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.

Heanne, L. The programmed peer-tutor relationship. One Schirado Place, San Rafael, California.



- Homme, L., & de Baca, P. C. The Premack principle applied to tutoring. One Schirado Place, San Rafael, California.
- Horowitz, II. Experimental learning methods in teaching psychology. Wake Forest University. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
- Hoschouer, R. L., & Young, W. Homework contingency contract The effect of an experimenter prompt in homework study behavior. University of Utah. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
- Howard, D. G. Some problems encountered in offering a senior level physics course using the Keller Plan. Paper presented at the conference on the Keller Plan.
- Hursh, D. E., Wildgen, J., Minkin, B., Minkin, N., Sherman, J. A., & Wolf, M. Proctor's Behavior and student's performance in a self-paced (PSI) undergraduate course. University of Kansas. Paper presented at the Conference on Behavior Research and Technology.
- It's Up To You, Individual Learning Systems, Incorporated, P. O. Box 2399, San Rafael, California 94902.
- Jacoby, K. <u>Problems in PSI</u>. University of California, Medical Center, San Francisco. Paper presented at the West Coast PSI Conference.
- Jenkins, J. R., & Deno, S.L. Influence of knowledge and type of objectives on subject-matter learning. Journal of Educational Psychology, 1971, 62, 67-70.
- Jernstedt, G. C. <u>PSI/T</u>: <u>Personalized instruction with emphasis on extra-classroom transfer</u>. Paper presented at the Conference on the Keller Plan.
- Johnston, J. M. An examination of critical variables in a behavioral approach to college teaching. Georgia State University. Doctorial dissertation, University of Florida, 1970.
- Johnston, J. M. <u>Tactics and Procedures for research</u>. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Johnston, J. M., & O'Neill, G. The analysis of performance criteria defining college grades as a determinate of college student academic performance. <u>Journal of Applied</u> Behavior Analysis, 1973, 6, 261-268.
- Johnston, J. M., & Pennypacker, H. S. A behavioral approach to college teaching. American Psychologist, 1971, 26 (3), 219-244.



Johnston, J.M., Roberts; M.D., & O'Neill, G. W. The measurement and analysis of college student study behavior, in G. Semb, ed., Behavior Analysis and Education, 1972

Jorganson, C. D., & Allen, A. L. The phase achievement system. Brigham Young University. Paper presented at the West Coast PSI Conference.

Julian J. R. K. 1981 in callege teacher training in geography. University of California, Los Angeles. Peper presented at the West Coast PSI Conference.

Juskevice, J. A., Properties of Minorals - A Programmed Lesson, Progred Publishers, Macomb, Illinois, 1973.

Kelem, R. T., & Freser, B. Two heads are better than one - Modification of college performance by peer monitoring. University of Washington. Paper presented at the annual meeting of the Western Psychological Association, 1972.

Keller, F. S. Engineering individualized instruction in classroom teaching. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1966.

Keller, F. S. Engineering personalized instruction in the classroom. <u>Revista</u> Interamericana de Psicologia, 1967, 189-197.

Keller, F. S. "Coodbye, teacher. . . " Journal of Applied Behavior Analysis, 1968, 1, 77 89.

Keller, F. S. A programme Laysten of instruction. <u>Educational Technology</u> Memoer schs, 1969, 2, (1).

*Keiler, F. S. Sciency traching will be better in the seventies. Paper presented at the needing of the superiors Perceintion for the Arxencen, at of Science, 1970.

Kerica, F. S. Madicated regards in the educational process, in S. R. Wilson, and D. T. Youn, Landing to Getting Figier, 1972.

Keller, F. S. A personal course in psychology, in J. G. Sherman, PSI: #1 Germinal Personal 1974.

Keller, F. S. New reinforcement contingencies in the classroom, in J. G. Sherman, PSI: 41 Carminal Papers, 1974.

Kerlin, B. M. The Keller Method of instruction compared to the traditional method of instruction in a Lafavorte College history course. Paper presented at the annual Pol College form, 1972.



- King, L. W., & Windmiller. Behavior modification in a junior college classroom. California State College, Fullerton. Paper presented at the annual meeting of the Western Psychological Association, 1972.
- Klein, M. A computer managed course in applied writing. California State University, Fullerton. Paper presented at the West Coast PSI Conference.
- *Knight, J. M., & Stephen F. <u>Programmed student achievement in an introductory psychology course</u>. Austin State University. Paper presented at the annual meeting of the Southwestern Psychological Association, 1971.
- *Knightly, J., & Sayre, J. Self paced instruction for library science students.

 Journal of Education for Librarianship, Winter, 1972, 193-197.
- Koen, B. V. An evaluation of an introductory nuclear engineering course taught by a self-paced method. Transactions of the American Nuclear Society, 1970.
- Koen, B. V. Learning to learn. Paper #SPE 2951. Society of Petroleum Engineers of the American Institute of Mining, 6200 North Central Expressway, Dallas, Texas.
- Koen, B. V. Self-paced instruction for engineering students. <u>Journal of Engineering</u> <u>Education</u>, 1970, 60, 735-736.
- Koen, B. V. Self-paced instruction in engineering A case study. <u>IEEE Transactions on Education</u>, 1971, E-14, (1), 13-20.
- Koen, B. V. Determining unit structure in a PSI course. Journal of Engineering Education, March, 1973, 432-434.
- Koen, B. V., & Keller, F. S. Experience with a proctorial system of instruction. Journal of Engineering Education, 1971, 61, 504-505.
- Koen, B. V., & Natalicio, L. <u>Teaching thinking Contingency management in a course in nuclear engineering</u>. Paper presented at the Southwest Psychological Association, 1970.
- Komaki, J. Effects of reinforcement contingencies indigenous to college classrooms. California State university, San Jose. Paper presented at the annual meeting of the American Psychological Association, 1973.
- Kulik, J. A. <u>Keller-Based Plans for Teaching and Learning</u>: <u>A Review of the Research</u>. Project on undergraduate education in Psychology, University of Michigan, June, 1972.



- Kutty, M. N. The Audio Tuterial system A new trend in science education. Biology News (Madurai University), 1971, 1 (2 & 3), 15-18.
- *Lane, S., & Brethower, D. Issues associated with the use of individualized instruction materials in large classes. Paper presented at the annual meeting of the American Psychological Association, 1973.
- *Lanson, R. N., & Benassi, V. A. A PSI course in behavior analysis. Queens College of the City University of New York. Paper presented at the West Coast PSI Conference.
 - Lanson, R. N., & Benassi, V. A. Some data on the availability of behavior modification training. Queens College of the City University of New York. Paper presented at the meeting of the Association for Advancement of Behavior Thorapy, 1972.
 - Lay, L. C. <u>PSI and remedial mathematics</u>. California State University, Fullerton. Paper presented at the West Coast PSI Conference.
- *Lee, S. Y. Early experiences with some aspects of PSI in comparative anatomy of the vertebrates. California State University, Humboldt. Paper presented at the West Coast PSI Conference.
- Leo, M. Keller Plan teaching at Barrington College. Barrington College, Barrington, Rhode Island. Paper presented at the Conference on the Keller Plan.
- Leo, M. Preliminary report on chemistry teaching by the Keller Plan. Paper presented at the Conference on the Keller Plan.
- Leo, M. Chemistry teaching by the Keller Plan, in J. G. Sherman, PSI: 41
 Germinal Papers.
- Levine, S., & Culbertson, S. Behavior principles: Fvaluation of the student's analytical skills. American University. Paper presented at the annual meeting of the American Psychological Association, 1973.
- Lewis, D. K., & Wolf, W. A. Implementation of self-paced learning (Keller Plan) in a first year course. Journal of Chemical Education, 1973, 50, 51-56.
- *Lewis, J. D. Preliminary results of manipulation of two variables in a contingencymanagement statistics class. Marietta College, Ohio. Paper presented at the West Coast PSI Conference.
- Lewis, O. PSI in mathematics for elementary school teachers. University of California, Les Angeles. Paper presented at the West Coast PSI Conference.



- Lloyd, K. E., & Knutzen, L. J. A self-paced programmed undergraduate course in the experimental analysis of behavior. <u>Journal of Applied Behavior Analysis</u>, 1969, 2, 125-133.
- Lloyd, K. E. Contingency management in university courses. <u>Educational Technology</u>, 1971, 11, 18-23.
- Lockhart, K. A., Sexton, J., & Lea C. The Findley Procedure: A method for examining choice-making behavior in academic settings. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- *Mahan, H. C. Some notes on the Cassette Assisted Programmed Instruction With Immediate Feedback System of Instruction (preface to workbook for Psychology 1). Director, Project Socrates, Department of Psychology, Palomar College, San Marcos, California.
- *Mahan, H. C. The use of socratic type programmed instruction in college courses in psychology. Paper presented at the annual meeting of the Western Psychological Association, 1967.
- Malaby, J. <u>Practical alternatives to individualized instruction</u>. Eastern Washington State College. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
- Malett, R. W. Every student can achieve excellence. School for General Studies Newsletter, 1969, 2 (1).
- Malott, R. W. A blueprint for educational revolution. Western Michigan University. Paper presented at the annual meeting of the Southwestern Psychological Association, 1971.
- Malett, R. W. The first, fly-by-night, underground, experimental college of Kalamazoo. Western Michigan University. Paper presented at the annual meeting of the Southwestern Psychological Association, 1971.
- Malott, R. W. Groundwork for an experimental college. Western Michigan University. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1971
- Malott, R. W., Hartlep, P. A., Keenan, M., & Michael, J. Groundwork for an experimental college. In Malott, R. W. (Editor), Research and development in higher education: A technical report of some behavioral research at Western Michigan University. Behaviordelia, Kalamazoo, Michigan, 1971.
- Malott, R. W., Hartlep, P. A., Keenan, M., & Michael, J. Groundwork for a student centered experimental college. Educational Technology, April, 1972.



- Malott, R. W., & Janczarek, K. The effect of daily quizzes on hour examination performance. Behaviordelia, Kalamazoo, Michigan.
- Malott, R. W., & Palm, J. Contingency Management revisited. <u>Journal of the Scientific Laboratories</u>, 1971, 4, 9-13.
- Malott, R. W., & Rollofson. An empirical evaluation of student-led discussions. Behaviordelia, Kalamazoo, Michigan, 1970.
- Malott, R. W., & Svinicki. Contingency management in an introductory course for one thousand students. Psychological Record, 1969, 19, 545-556.
- Massey, W. The ICTOS Introductory Physics course. Brown University. The ICTOS Newsletter, 1973, 6.
- Master, M. Computer base for individualized instruction. Paper presented at the Conference on the Keller Plan.
- Masterten, R. B., Comeaux, P., & Grosslight, J. H. <u>Precision teaching of introductory psychology</u>. Florida State University. Paper presented at the annual meeting of the American Psychological Association, 1971.
- *Mathieu, G. B. How to pay tolors. California State University, Fullerton. Paper presented at the West Coast PSI Conference.
- Mawhinney, V. T., Bastow, D. E., Laws, D. R., Blumenfield, G. T., & Hopkins, B. L. A comparison of students studying behavior produced by daily, weekly, 3-week testing schedules, Journal of Applied Behavior Analysis, 1971, 4, 257-264.
- Mayhew, G., & Nazzar. ... A comparison of student-paced and teacher-paced instruction in a centing may managed course. Mayhew, Clark County School District, Reno, Nevada, and Nazzara, American Psychological Association, Washington, D. C. Paper presented at the annual meeting of the Western Psychological Association, 1972.
- *McIntire, R. W. Alternatives to the classroom model Individualized operant strategies. University of Maryland. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
 - McKean, II., Newman, F., & Purtle, R. Personalized instruction in a three semester mathematics and statistics service sequence, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
 - McKnight, P.C. Consistency theory, social power, and instructional innovation. University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.



- *McMichael, J. Personalized instruction. Paper presented at the annual meeting of the American Psychological Association, 1971.
- McMichael, J., & Corey, J.R. Contingency management in an introductory psychology course produces better learning. <u>Journal of Applied Behavior Analysis</u>, 1969, 2, 79-83.
- McMullen, W. R. <u>PSI in 'Man and Society' and 'Family studies'</u>. Preston High School, Ontario. Paper presented at the West Coast PSI Conference.
- Meriam, J. L. Experiments with unitized instruction in engineering mechanics. California State Polytechnic University, San Luis Obispo. Paper presented at the West Coast PSI Conference.
- Mertens, G. C. <u>Behavioral road's scholars</u> (a modified version of the audio script for a 3-screen slide-tape presentation). Psychology Department, St. Cloud State College, St. Cloud, Minnesota.
- *Mertens, G. C. <u>Towards individualized instruction A Psychology handbook</u>, Psychology Department, St. Cloud State College, St. Cloud, Minnesota.
- Mertens, G. C., Luker, & Baltuck, Tomorrow's education today, unpublished manuscript, 1969, Psychology Department, St. Cloud State College, St. Cloud, Minnesota.
- Michael, J. Management of behavioral consequences in education. Revisita Interamericana de Psicologia, 1969, 3 205-252.
- Milan, M. A., & Wood, L. F. <u>Textbook</u>, <u>machine</u>, <u>and precision teaching A comparison of three formats for presenting programmed material</u>. Rehabilitation Research Foundation, Elmore, Alabama. Paper presented at the annual meeting of the American Psychological Association, 1971.
- Miller, L.K., & Weaver, F.H. A multiple baseline achievement test, in G. Semb, ed., Behavior Analysis and Education, 1972.
- Miller, L.K., Weaver, F.H., & Semb, G. A procedure for maintaining student progress in a personalized university course. <u>Journal of Applied Behavior Analysis</u>, in press.
- Miller, L.K., & Weaver, F.H. The use of 'generalization programming' to teach behavioral concepts to undergraduates. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Miles, D. T., Kibler, R. J., & Pettigrew, L. E. The effects of study questions on college students test performance. <u>Psychology in the Schools</u>, 1967, 32, 25-26.



1

- Mills, H., & Few, M. R. Streamlined English courses. American River College. Paper presented at the West Coast PSI Conference.
- *Mings, T. Small group learning activities as a variation on PSI. California State
 University, San Jose. Paper presented at the West Coast PSI Conference.
- Minke, K. A., & Carlson, J. G. A comparison of two lecture systems in unit mastery instruction. University of Hawaii. Paper presented at the annual meeting of the American Psychological Association, 1973.
- Moesser, A. A program of individualized instruction in Spanish without failure. Callfornia State College, Dominquez Hills. Paper presented at the West Coast PSI Conference
- *Moore, J. W. The application of the continuous progress concept to the natural sciences in higher education. Bucknell University, Lewisburg, Pennsylvania.
- Moore, J. W., Hauck, W. E., & Gagne, E. D. Acquisition, retention, and transfer in an individualized college physics course. Journal of Educational Psychology, 1973, 64, 335-340.
- Moore, J. W., Mahan, J. M., & Ritts, C. A. Continuous progress concept of instruction with university students. Psychological Reports, 1969, 25, 887-892.
- Morris, C., & Kimbrill, G. McA. Performance and attitudinal effects of the Keller Method in an introductory psychology course. <u>Psychological Record</u>, 1972, 22, 523-530.
- *Morrow, J. P. On the lecture and the Keller Method. California State University. Paper presented at the West Coast PSI Conference.
 - Mesaic, 4 (1), 10-15 "Individualized instruction goes to college". The article describes the work of Postlethwait and the Audio-Tutorial System. PSI is also described. Mosaic is a publication of the National Science Foundation, available at \$1.25 by writing Super-Intendent of Documents, U.S. Government Printing Office, Washington, D. C.
 - Motazed, B. A learning system for applied statistics. University of Texas, Austin. M.S. thesis in operations research and industrial engineering, 1971.
 - Mount, G. A comparison of introductory psychology courses under behavior management and traditional procedures. North Texas State University. Paper presented at the annual meeting of the Southwestern Psychological Association, 1971.
 - Muir, W. R. A comparison of classes taught by a conventional procedure under normal conditions & by a PSI procedure under aversive conditions. University of Saskatchewan, Regina. Paper presented at the West Coast PSI Conference.



- Myers, W. A. Operant learning principles applied to teaching introductory statistics. Journal of Applied Behavior Analysis, 1970, 3, 191-198.
- Nagel, T. S. PSI in teacher corps program. California State University, San Diego. Paper presented at the West Coast PSI Conference.
- Nelson, T. F., & Bennett, M. Unit size and progress rates in self-paced instruction. Journal of College Science Teaching, 1973, 3, (2).
- Nelson, T. F., & Scott, D. W. Personalized instruction in educational psychology. Michigan Academician, 1972, 4, (3).
- *Newman, F. L. An essay on grades (from a memo), June 7, 1971. New Mexico State University.
- Newman, F. L., Young, D., Ball, S., Smith, C., & Purtle, R. Initial attitude differences among successful, procrastinating and "withdrawn-from-course" students in a personalized system of statistics instruction, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
- Newton, J. M. <u>PSI enlightens the "dismal science"</u>. University of Oregon. Paper presented at the West Coast PSI Conference.
- Nicholas, R. K., & Cone, A. L. <u>Student taught but instructor paced</u>. Lynchburg College. Paper presented at the annual meeting of the Southeastern Psychological Association, 1972.
- *O'Connell R. H. What to do until the study guide arrives. California State University, Northridge. Paper presented at the West Coast PSI Conference.
- O'Neill, G., Johnston, J., Walters, W., Rasheed, J. The effects of quantity of subject matter on student academic performance and study behavior. Georgia State University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- O'Neill, G., Walters, W., Rasheed, J., & Johnston, J. <u>Validity of the study report form-II</u>. Georgia State University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Pare, R. C. <u>Modified PSI for problem solving engineering courses</u>. California State Polytechnic University, Pomona. Paper presented at the West Coast PSI Conference.
- Park, R. T. <u>Coupled PSI courses in mathematical physics</u>. California State University, Northridge. Paper presented at the West Coast PSI Conference.



- Paskusz, G. K. PSI in large multisection engineering courses. University of Houston. Paper presented at the West Coast PSI Conference.
- Pennington, P. R. Some steps toward super-structure in PSI. Paper presented at the West Coast PSI Conference.
- *Pennington, P. R. Some steps toward more flexible instruction. Paper presented at the West Coast PSI Conference.
- *Pennington, P. R. Nonscalar description of Keiter Plan effectiveness. 3066 SW Flower Terrace, Portland, Oregon.
- Pennypacker, H. S. Precision teaching of an undergraduate program in behavior principles. Paper presented at the annual meeting of the Midwestern Psychological Association, 1969.
- *Pennypacker, H. S. <u>Psychology 421-621</u>, <u>Student Handbook Spring</u>, 1971. Department of Psychology University of Florida, Gainesville, Florida.
- *Pennypacker, H. S. Psychology 421-621, Manager Handbook Spring, 1971.

 Department of Psychology, University of Florida, Gainesville, Florida.
- Pennypacker, H. S. Precise explorations of complex verbal behavior. University of Florida. Paper presented at the annual meeting of the Southeastern Psychological Association, 1972.
- Peterson, M. Behavierel analysis of women's reles: A modified PSI approach.
 University of Rechester. Paper presented at the Conference on the Behavior Research and Technology in Higher Education.
- *Peterson, P. PSI in liberal arts college Tailoring the course to the student.
 Whitman College, Walla Walla, Washington. Paper presented at the West Coast PSI
 Conference.
- Peura, R. A., Scott, K. E., & Hunter, S. A. Evaluation of an IPI course in control engineering. Engineering Education, 1973, 63, (7).
- Pffanz, B. Self-directed learning on an individualized program. <u>Hubert Eaton</u> Program Newsletter, 1973, 1 (2). University of Redlands, California.
- Philippas, M. A., & Sommerfeldt, R. W. Keller vs lecture method in general physics instruction. American Journal of Physics, 1972, 40, 1300.
- Polsky, S. Student personality types and their role in PSI. University of California, Berkeley. Paper presented at the West Coast PSI Conference.



- Postlethwait, S. N. "Minicourse" The style of the future. <u>Commission on Undergraduate Education in Biological Sciences</u>, 31.
- Postlethwait, S. N. Students are a lot like people! University Vision, 1972, 8.
- Postlethwait, S. N., & Hurst, R. N. The audio-tutorial system incorporating minicourses and mastery. Purdue University, Department of Biological Sciences, Lafayette, Indiana.
- Postlethwait, S. N., & Novak, J. D. The use of 8-mm loop films in individualized instruction. Annals of the New York Academy of Sciences, 142, 464-470.
- *Postlethwait, S. N., & Wright, E. R. <u>Media</u>, <u>audio-tutorial system and minicourse</u> <u>a concern for individualization</u>. Department of Biological Sciences, Purdue University, Lafayette, Indiana.
- *Powers, R. B. Personalized systems of instruction How evaluate? Paper presented at the annual meeting of the Rocky Mountain Psychological Assocition, 1972.
 - Powers, R. B. Problems of measurement in evaluating a personalized system of instruction. Utah State University. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
- *Powers, R. B., & Edwards, K. A. Personalized introductory psychology at Utah State University. A progress report, 1970 - 1971. (This paper is adapted and condensed from an earlier version presented at the meeting of the Utah Academy of Sciences, Arts, & Letters, Logan, Utah, 1971.)
 - Powers, R. B. Edwards, K.A., & Hoehle, W. An adjusting reinforcement schedule facilitates exam-taking in a self-paced course. Psychological Record, in press.
 - Protopapas, P. A report on the use of the Keller Plan in a general biology course at Lowell State College, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
- *Quarles, C. A. A partially self-paced approach to general physics. Paper presented at the Conference on the Keller Plan.
 - Quigley, P., A. An analysis of student manager-student interactions during performance sessions. University of Southern Mississippi. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- *Rapp, J. B. <u>PSI in community college engineering technology</u>. California State Polytechnic University, San Luis Obispo. Paper presented at the West Coast PSI Conference.



Rapp, J. B. Direct current: A self paced individual study program for engineering and engineering technology students. California State Polytechnic University, Sentus Obispo.

Rasheed, J. A., O'Neill, G. W., Walters, W. M., & Johnston, J. M. A description of typical study behavior in a behaviorally taught course. Georgia State University. Peper presented at the Conference on Behavior Research and Technology in Higher Education.

Rood, D. K., & Coles, W. J. Two PSI freshmen calculus courses. University of Utah. Paper presented at the West Coast PSI Conference.

Reed, R. J. When students teach (tutoring by peers). The Research Reporter, 1973, VIII, (1).

Robin, A. Effect of teacher vs student pacing in personalized systems of instruction. Unpublished manuscript, State University of New York at Stony Brook, in press.

*Robinson, P. Personalized instruction in large classroom situations - Part II.

Brigham Young University. Paper presented at the annual meeting of the Rocky
Mountain Psychological Association, 1971.

*Rebinsen, P. Contingent systems of instruction - CSI. Paper presented at the annual meeting of the Recky Mountain Psychological Association, 1972.

Robinson, P. To test or not to test. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.

Rogers, J.: Using bely vioral objectives menus in the survey course. Department of Education, Purdue University Calumet, Hammend, Indiana.

Rogers, J. A contingency management procedure for the "survey" course. Improving Human Performance: A Research Quarterly, 1972, 1, (4).

Rosati, P.A. A comparison of the personalized system of instruction with the lecture method in teaching elementary dynamics. University of Western Ontario. Paper presente at the Conference on behavior Research and Technology in Higher Education.

Rosen, M. J., & Machado, B. <u>PSI in large photography courses</u>. California State University, Fullerton. Paper presented at the West Coast PSI Conference.

Roth, C., H., Jr. Continuing effectiveness of personalized self-paced instruction in digital systems engineering. Engineering Education, 1973, 63, (6).

*Rubenstein, J., & Friedman, M. The "cafeteria of learning" - An experience in informal learning and individualized instruction. Purdue University.

1



- Rusmore, J. T. Report on PSI in introductory psychology. California State University, San Jose. Paper presented at the West Coast PSI Conference.
- Sayre, J. L., & Knightly, J., ed. The Personalized System of Instruction in Higher Education, Seminary Press, Box 2218, University Station, Enid, Oklahoma. \$2.95 plus 35% postage/handling.
- Schraum, W. The research on programmed instruction: an annotated bibliography. Washington, D. C.: United States Office of Education Publication OE 34034, 1964.
- Science News, April 16, 1973, 103, (16), 260-263, "Behavior modification Here," there and everywhere". A major sub-section of this article describes PSI.
- Scott, W. C. A preliminary analysis of the individually perscribed teaching method in a junior level elective course. University Committee on Educational Innovation, Oklahoma State University, Progress Report #1, October, 1971.
- Scott, W. C., Olden, B., & Johnson, C. Student progress in and evaluation of an individually prescribed instruction course. Oklahoma State University.
- Scott, W. C. The <u>Development and implementation of an individually prescribed instructional format for an introductory social psychology course</u>. Oklahoma State University.
- Scott, K. A cross discipline IPI approach to control engineering. Education Research and Methods, 1972, 4, (4).
- Sears, J. T. Developing intellectual skills in a self-paced course. <u>Journal of Engineering Education</u>, 1971, 61, 515-516.
- Seltzer, R. A. Individualizing instruction in an introductory course. University of Michigan. Paper presented at the annual meeting of the American Psychological Association, 1973.
- Semb, G., editor, <u>Behavior Analysis</u> and <u>Education</u>, The University of Kansas Support and Development Center for Follow Through, Department of Human Development, Lawrence, Kansas, 1972.
- *Semb, G. Effects of grading criteria and assignment length on student test performance in a personalized instruction course. University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.
- *Semb, G. Research strategies in higher education. University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.



- Semb, G. Personalized instruction: The effects—mastery criteria and assignment length on college student test performance. <u>Journal of Applied Behavior Analysis</u>, in press.
- Semb, G., Conyers, D., Spencer, R., & Sanchez Sosa, J. J. An experimental comparison of four pacing contingencies in a personalized instruction course. University of Konsas. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Semen, H. A. Precision teaching in a neighborhood program. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
- Sewell, W. R., McCoy, & Ward. Behavioral objectives in undergraduate experimental and behavior analysis classes. Memphis State University. Paper presented at the annual meeting of the Southeastern Psychological Association, 1972.
- Sexton, J. W., Merbitz, C., & Pennypacker, H.S. <u>Accountability: Cost efficiency and effectiveness measures in behavioral college teaching.</u> University of Florida. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Shapiro, D. M. <u>Medical school biochemistry via PSI</u>. University of Texas, Medical School at San Antonio. Paper presented at the West Coast PSI Conference.
- *Sheehan, T. J. The Keller Method salvages a disaster area. University of Connecticut Health Center, Farmington, Connecticut. Paper presented at the annual meeting of the American Psychological Association, 1973.
 - Sheppard, W. C., & MacDermott, H. G. Design and evaluation of a programmed course in introductory psychology. Journal of Applied Behavior Analysis, 1970, 3, 5-11:
 - Sheppard, W. C. PSI in introductory psychology A case history. University of Oregon. Paper presented at the West Coast PSI Conference.
 - Sherman, J. G., PSI: 41 Germinal Papers, W. A. Benjamin, Menlo Park, California, 1974.
 - Sherman, J. G. Application of reinforcement principles to a college course, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
 - Sherman, J. G. A permutation on an innovation A new role for proctors, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.



- Sherman, J. G. PSI An historical perspective, in J. G. Sherman, <u>PSI</u>: <u>41 Germinal Papers</u>, 1974.
- Sherman, J. G. PSI Some notable faitures, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
- Sherman, J. G. The theory behind PSI, in J. G. Sherman, PSI: 41 Germinal Papers; 1974.
- Sherwood, M. Educational innovators. New Scientist (Britain), 1973, 610-612.
- Shupe, D. V., & Meeker, F. B. <u>Comparative study of PSI vs conventional introductory psychology</u>. California State Polytechnic University, Pomona. Paper presented at the West Coast PSI Conference.
- *Sides, E., & Edwards, K. A. <u>Testing in a personalized system of instruction</u>. Utah State University. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, 1972.
- Silver, M. <u>Self-paced physics at UNC</u>. Paper presented at the Conference on the Keller Plan.
- *Simmons, L. M. <u>Self-paced personalized instruction in elementary physics</u>. Paper presented at the Conference on the Keller Plan.
 - Stachnik, T. J., & Ulrich, R. A laboratory section for educational psychology. Psychological Record, 1969, 9, 129-132.
 - Stalling, R. B. A one-proctor programmed course procedure for introductory psychology. Psychological Record, 1971, 21, 501-505.
 - Stanfield, E. P. Experiment in individualized learning at Georgia State, in J. G. Sherman, PSI: 41 Germinal Papers, 1974.
 - Stice J. E., editor, Bureau of Engineering Teaching, College of Engineering, The University of Texas at Austin, <u>The personalized system of instruction (PSI)</u> The Keller Plan applied in Engineering education, Bulletin No. 4. \$2.00.
 - Stodola, Q. O. Student pacing vs instructor pacing. California State College, Dominquez Hills. Paper presented at the West Coast PSI Conference.
- *Stodola, Q. O. Use of computer-based test assembly systems in teaching psychology. Paper presented at the annual meeting of the Western Psychological Association, 1972.
- *Stodola, Q. O. <u>Teaching of experimental courses appropriate for large size classes</u>. Report for pilot project, California State College, Dominquez Hill, 1973.

- *Stolurow, K. A. Learning and retention as a function of instructional sequencing.

 State University of New York at Stony Brook. Paper presented at the annual meeting of the Eastern Psychological Association, 1972.
- Sutterer, J. E., & Holloway, R. E. An analysis of student behavior in a self-paced introductory psychology course. Syracuse University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Swartz, C., & Zipfel, C. Individualized instruction in introductory physics. American Journal of Physics, 1972, 40, 1436-1442.
- Szydlik, P. P. Results of a one-semester self-paced physics course at the State University College, Plattsburgh, New York, in J. G. Sherman, <u>PSI</u>: <u>41 Germinal Papers</u>, 1974.
- Taber, J. I., Glaser, R., & Schaefer, H. H. Learning and Programmed Instruction, Addison-Wesley, Reading, Massachusetts, 1965.
- *Taylor, P. Abstract of student performance and attitudes: A contingency management course compared to traditionally-taught courses (with course handout),

 State University of New York College at Brockport.
 - Terman, M. A personalized instructional system for mass-enrollment courses, using TV-interaction. Paper presented at the conference on the Keller Plan.
 - Torzaghi, E. Introducing biology via PSI. University of California, Santa Cruz. Paper presented at the West Coast PSI Conference.
- *Theobold, E. A preliminary proposal for a school of human behavior. Pasadena City College. Paper presented at the West Coast PSI Conference.
- Thiagarajan, S. Humans rediscovered, or no, there won't be a teacher shortage in the year 2,000, in J. G. Sherman, PSI: 41 Germinal Papers.
- Thinger, B. S. Change and diffusion in higher education. California State University, San Francisco. Paper presented at the West Coast PSI Conference.
- Tietenberg, T. H. Teaching microeconomics at Williams using the personalized system of instruction: An evaluation. Williams College. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Tobias, S. Preference for instructional method and achievement. Florida State University. Paper presented at the annual meeting of the Eastern Psychological Association, 1972.



- *Toepher, C., Shaw, D., & Moniot, D. The effect of item exposure in a contingency management system. Slippery Rock State College. Paper presented at the annual meeting of the American Psychological Association, 1972.
- Tosti, D. T. Contract grading. Working paper #19, Individual Learning Systems, Incorporated, P.O. Box 2399, San Rafaet, California.
- Tosti, D. T. <u>Developing individualized instructional systems</u>. unpublished manuscript, Individual Learning Systems, Incorporated.
- Tosti, D. T. The individualization of instruction. unpublished manuscript, Individual Learning Systems, Incorporated.
- Tosti, D. T. <u>Skinner's Grandchildren</u> unpublished manuscript, Individual Learning Systems, Incorporated.
- Tosti, D. T. How universal is educational technology. unpublished manuscript, Individual Learning Systems, Incorporated.
- Tostl, D. T. The interactive instructional model, unpublished manuscript, Individual Learning Systems, Incorporated.
- Tosti, D. T. <u>Prime A General Model for Instructional Systems</u>, Individual Learning Systems, Incorporated.
- Tosti, D. T., & Ball, J. A behavioral approach to instructional design and media selection. AV Communication Review, 1969, 17, (1).
- Tosti, D. T., Chadwick, & Bell. A defined role for the teacher, Introductory-Psychology Instructor's Manual, III, Selected Readings, Validation Printing Date, 8/15/70.
- Tosti, D. T., & Harmon, N. P. A taxomony for decision-making in individualized instruction, unpublished manuscript. Individual Learning Systems, Incorporated.
- Tosti, D. T., & Harmon, N. P. The management of instruction. A.V. Communication Review, 1973, 21, (1).
- Tosti, D. T., & Homme, L. E. Contingency management and motivation. <u>National Society for Programmed Instruction Journal</u>, 1965, 14, (7).
- Treffinger, D. Improving instruction: For what?, For whom?, And how do we know? University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.



- Vicino, F. L., Gosell, B., & Landy. Development and evaluation of PROPID A program of sell instructional exercises for personal and interpersonal development. University of Rochester. Paper presented at the annual meeting of the Eastern Psychological Association, 1972.
- Wagner, G. R. A learning system for applied statistics. Paper presented at the American Statistical Association Convention, 1971.
- Wagner, G. R. An engineered learning system for teaching applied statistics using self-paced and computer assisted instruction. Paper presented at the annual meeting of the American Society for Engineering Education, 1971.
- *Walen, S.R. <u>Personalized instruction using the oral interview technique</u> <u>Preliminary report on near-zero procrastination problems</u>. Paper presented at the <u>Conference on the Keller Plan</u>.
 - Walters, R. F. Individualized instruction with computer support. University of California, Davis. Paper presented at the West Coast PSI Conference.
- Walters, W. M., O'Neill, G. W., Rasheed, J. A., & Johnston, J. M. Validity of the study report form-I. Georgia State University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- *Waranch, H. R. Course pamphlet for foundations of psychology. Northeastern University.
- Wathen, Y., & Smith, R. A proctor's point of view of unitized/personalized psychology 100. California State University, Long Beach. California State University at Long Beach Psychology Convention.
- *Watts, T. M. College wide PSI. California State College, Bakersfield. Paper presented at the West Coast PSI Conference.
- Weaver, F. H., & Miller, L. K. The effects of a proctor training package on university students' proctoring behaviors in a personalized system of instruction setting. University of Kansas. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Weaver, F. H., & Miller, L. K. Effect of frequent quizzing on university students quiz performance. University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.
- Weaver, F. H., & Miller, L. K. <u>Programming concept formation in a university course</u>. University of Kansas. Paper presented at the annual meeting of the American Psychological Association, 1973.



- Weisman, R. A., & Shapiro, D.M. Implications of PSI for medical school. Paper presented at the West Coast PSI Conference.
- Weisman, R. Al., & Shapiro, D. M. PSI for medical school blochemistry. University of Texas, Medical School at San Antonio. Journal of Medical Education, 1973, 48.
- Wells, W. C. A personalized system of instruction in physics A compilation of Keller Plan resource materials. University of Pittsburgh, Department of Physics, Pittsburgh, Pennsylvania.
- Whitehurst, G. T. Academic responses and attitudes engendered by a programmed course in child development. Journal of Applied Behavior Analysis, 1972, 5, 283-291.
- Whitehurst, C., & Whitehurst, G. T. Forced excellence versus 'free choice' of grades. C. W. Post College. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- *Whitney, J., & Whitney, G. Developing a course of study based on behaviorally stated objectives. Brevard Junior College. Paper presented at the annual meeting of the Southeastern Psychological Association, 1971.
- *Wiley, S. Classroom teacher support system. California State College, Dominquez Hills. Paper presented at the West Coast PSI Conference.
- Williams, R. L. The combined and differential effects of two types of preparatory quizzes on college student behaviors. Western Michigan University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Williams, V., Fuller, R., & Joseph, D. A guide to what, how, why & why not of PSI. Order from Dr. James G. Buterbaugh, Instructional Media Center, 421 Mebraska Hall, University of Nebraska, Lincoln, Nebraska.
- Wilson, S. R., & Tosti, D. T. <u>Learning is Getting Easier</u>. <u>Individual Learning</u>
 Systems, Incorporated, 1972.
- *Witters, D. R. Personalized instruction in the small college Evidence and issues. Bridgewater College. Paper presented at the annual meeting of the Southeastern Psychological Association, 1972.
- Witters, D. R. <u>Personalized Instruction in undergraduate psychology</u> <u>Evidence and issues</u>. Paper presented at the annual meeting of the Eastern Psychology Association, 1973.
- Witters, D. R., & Kent G. W. An experimental evaluation of programming student study behavior in undergraduate courses. Department of Health, Education and Welfare, 1970.



- Witters, D. R., & Kent, G. W. Teaching without lecturing Evidence in the case for Individualized instruction. The Psychological Record, 1972, 22, 169-175.
- Wodarski, J. S., & Buckholdt, D. Personalized instruction in college classrooms:

 A review of methodological procedures. Washington University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- Wood, Ronald. A student maintained filing and scheduling system for interview classroom technique. * The Psychological Record, 1972, 22, 491-496.
- Wood, W. S., & Wylie, R. G. <u>Individualized systems of instruction are better</u>... <u>For whom?</u> Drake University. Paper presented at the Conference on Behavior Research and Technology in Higher Education.
- *Young, D. L., McKean, H. E., & Newman, F. L. <u>PSI in an undergraduate mathematics</u> service sequence. New Mexico State University. Paper presented at the West Coast PSI Conference.
- Yu, J., & Celinski, O. Undergraduate Index, Technical report No. 71-5, Sept., 1971. University of Ottawa, Electrical Engineering Department, Ottawa, Canada. Paper presented at the Conference on the Keller Plan.
- *Zeilik, M. <u>An intensive PSI astronomy course</u>. Harvard University, Department of Astronomy, Cambridge, Massachusetts.
- Zippel, B. <u>Self-paced Instruction for Psychological Statistics</u>. Hunter College. Unpublished paper, 1971.

